

Figure 1

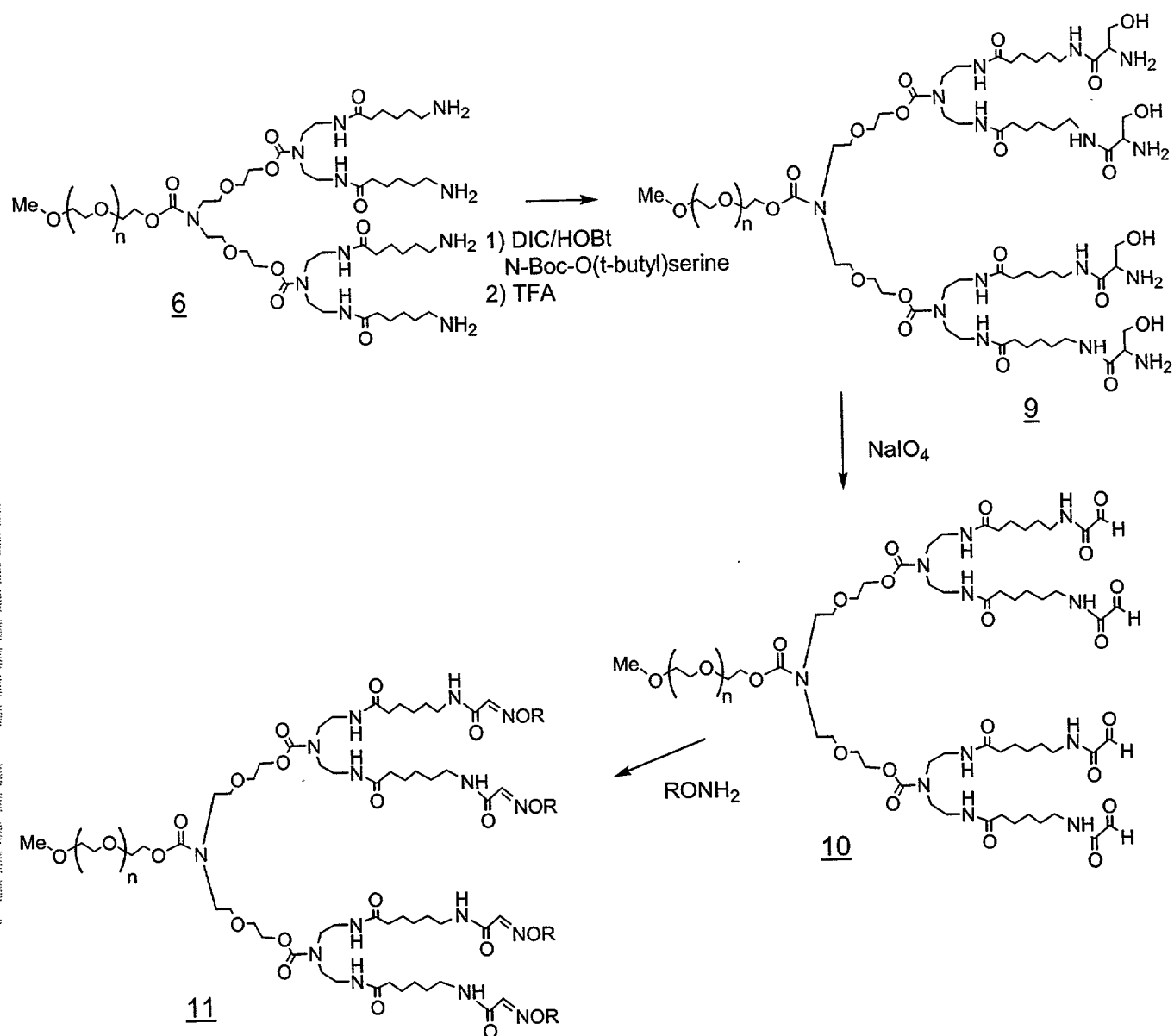


Figure 2

(BTC)O(COCH2)O(BTC) + NH(CH2)6C(=O)NHCbz

$\downarrow$

NHCbz(CH2)6C(=O)N(CH2)6C(=O)N(CH2)6C(=O)O(COCH2)O(COCH2)O(COCH2)N(CH2)6C(=O)NHCbz

$\downarrow$

NH(CH2)6C(=O)N(CH2)6C(=O)N(CH2)6C(=O)O(COCH2)O(COCH2)O(COCH2)N(CH2)6C(=O)NH2

$\downarrow$

ClCH2C(=O)N(CH2)6C(=O)N(CH2)6C(=O)O(COCH2)O(COCH2)O(COCH2)N(CH2)6C(=O)NCH2Cl

$\downarrow$  RSH

SRCH2C(=O)N(CH2)6C(=O)N(CH2)6C(=O)O(COCH2)O(COCH2)O(COCH2)N(CH2)6C(=O)NCH2SR

### Figure 3

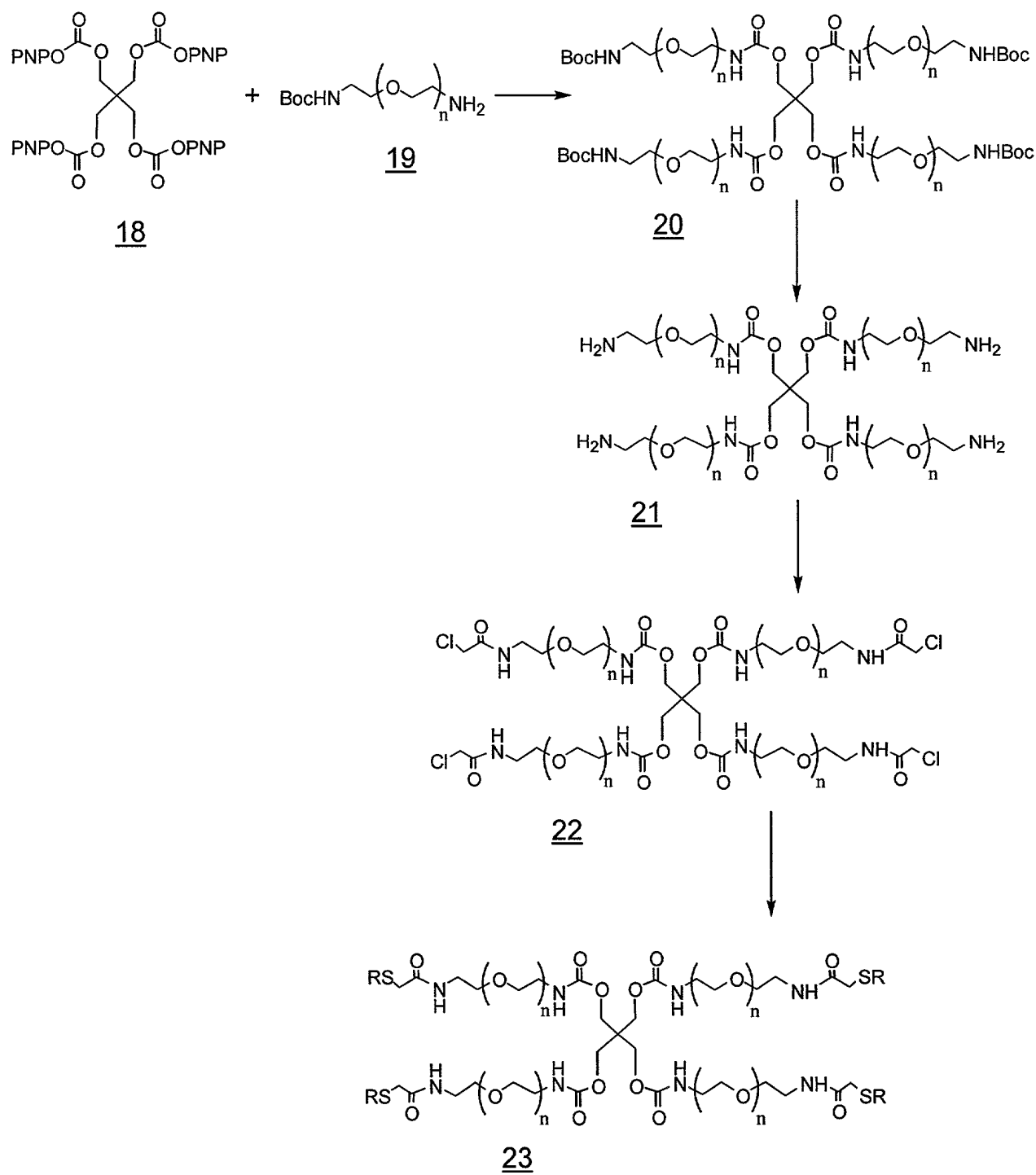
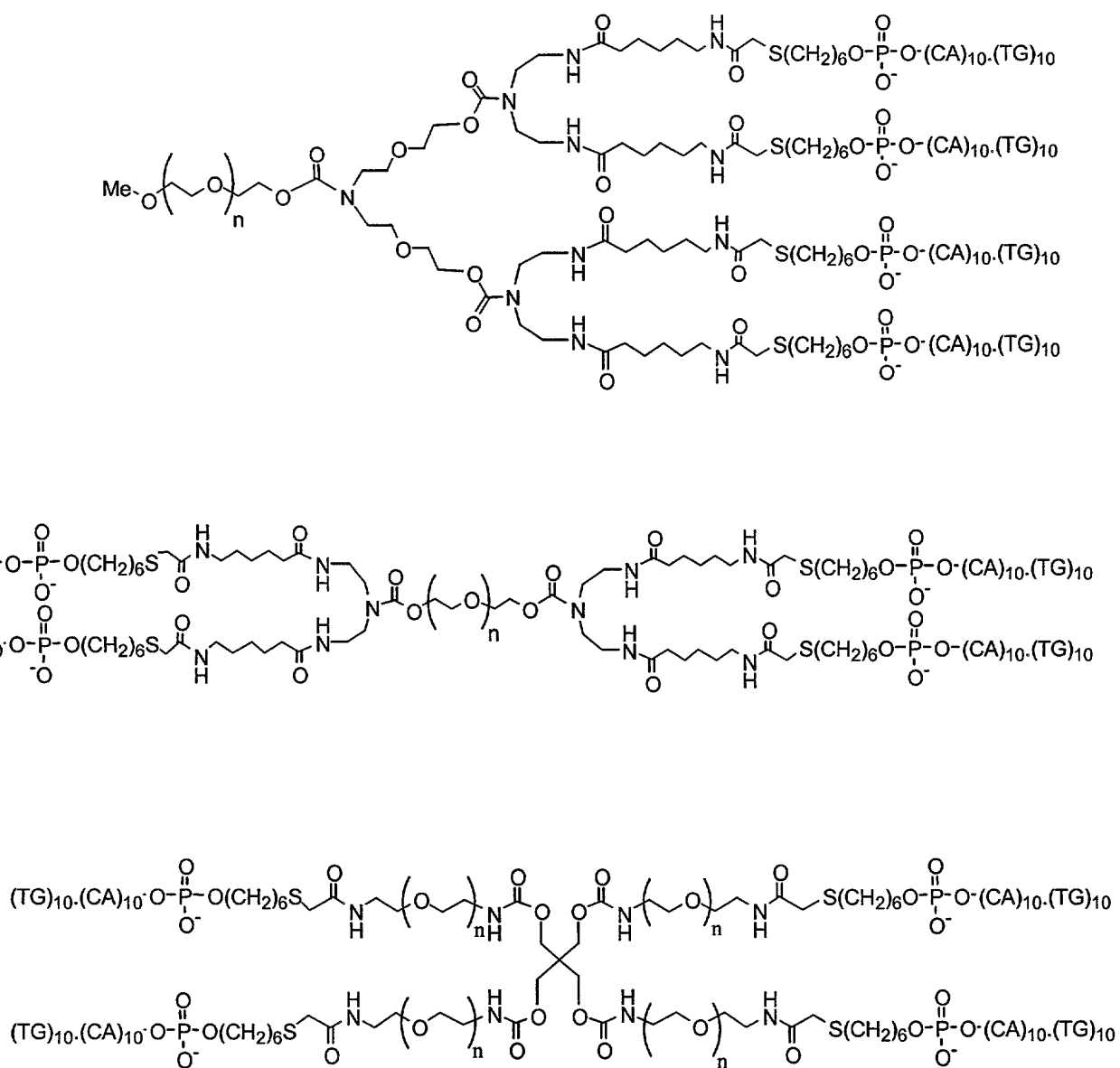


Figure 4



**Figure 5**

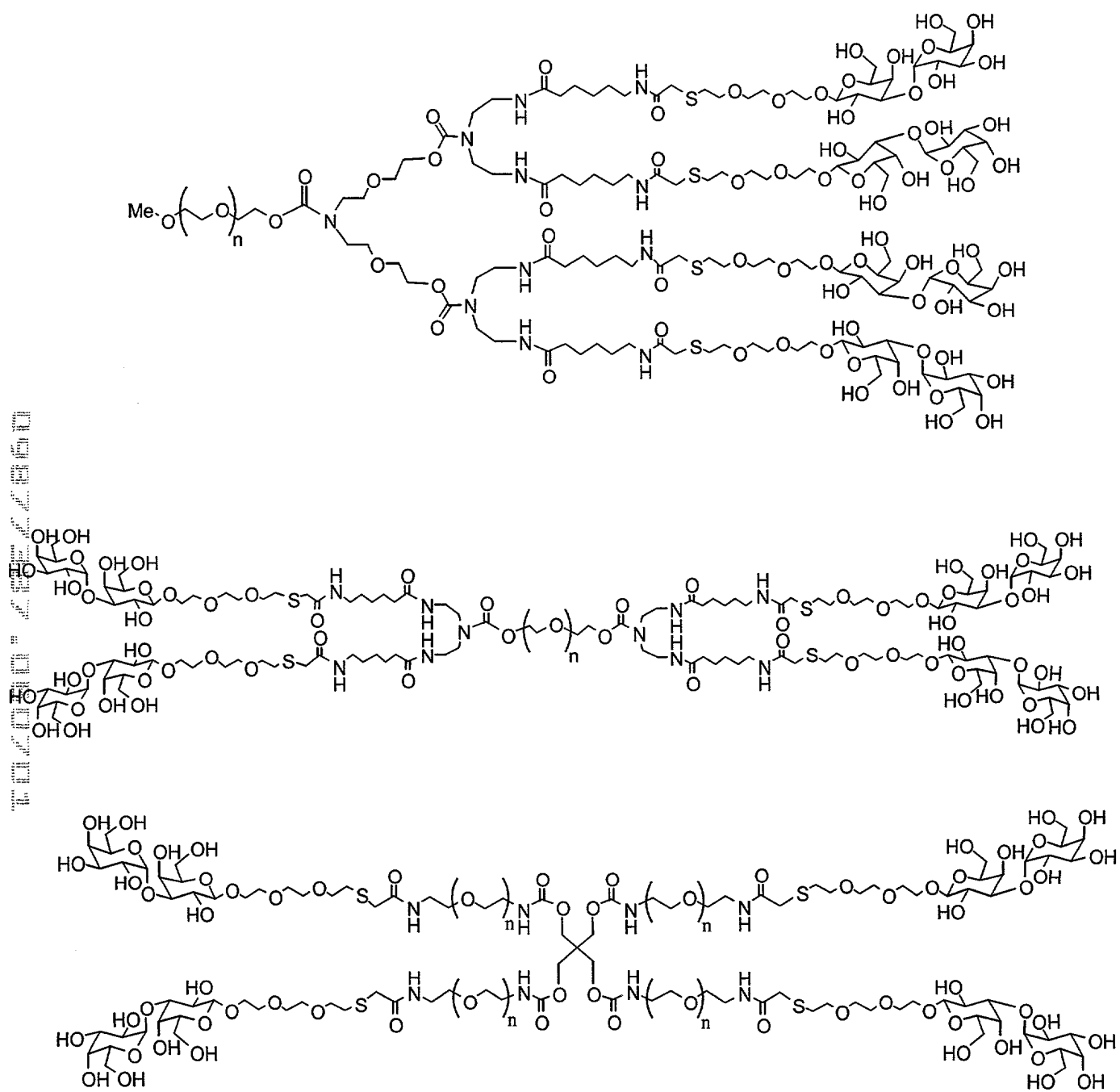
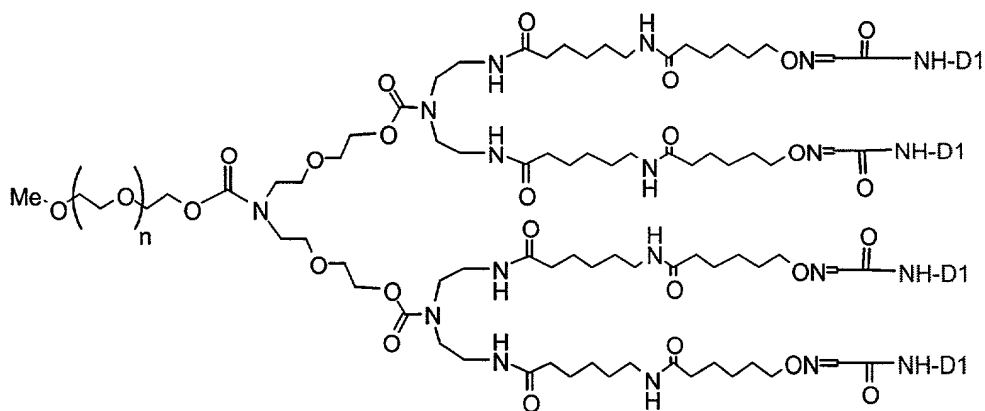
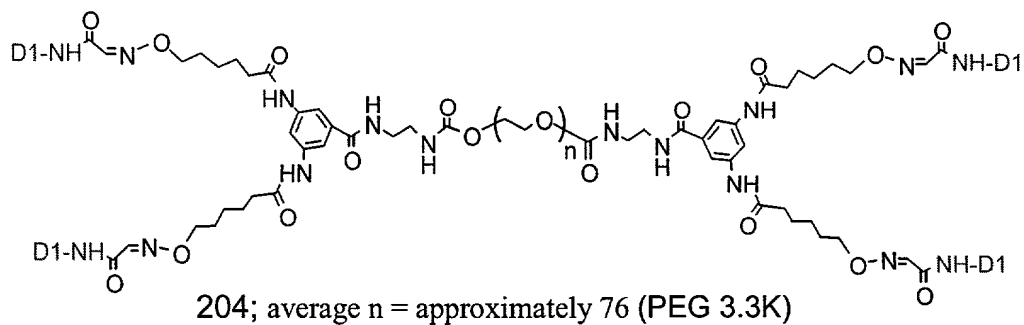


Figure 6



201; average n = approximately 114 (PEG 5K)

205; average n = approximately 261 (PEG 12K)

301; average n = approximately 682 (PEG 30K)

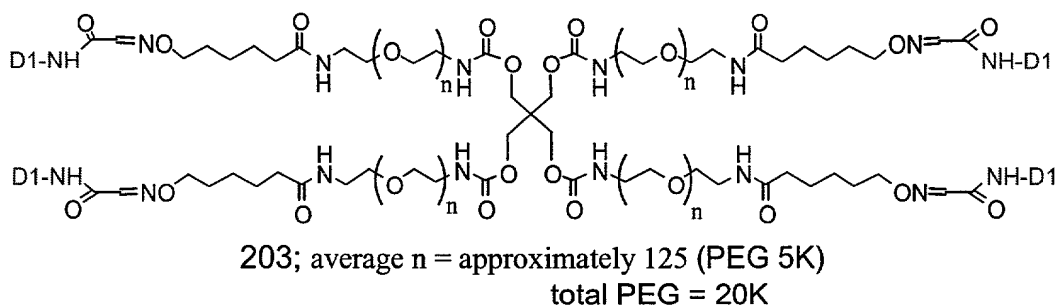
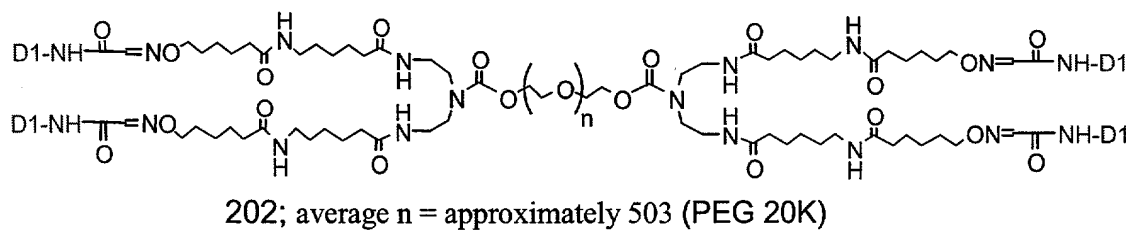
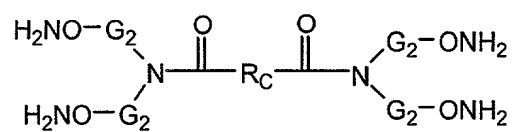
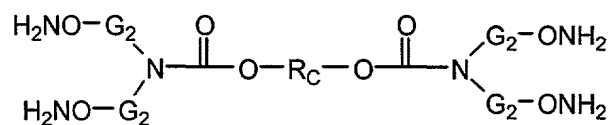


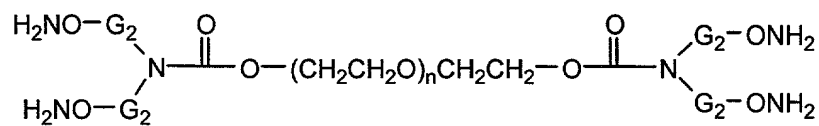
Figure 7



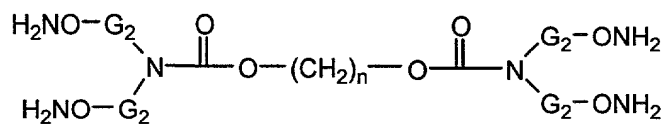
Formula 9



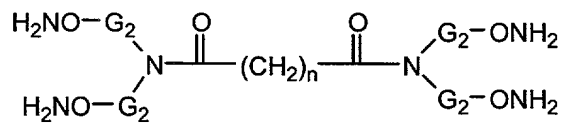
Formula 10



Formula 11



Formula 12



Formula 13

Figure 8



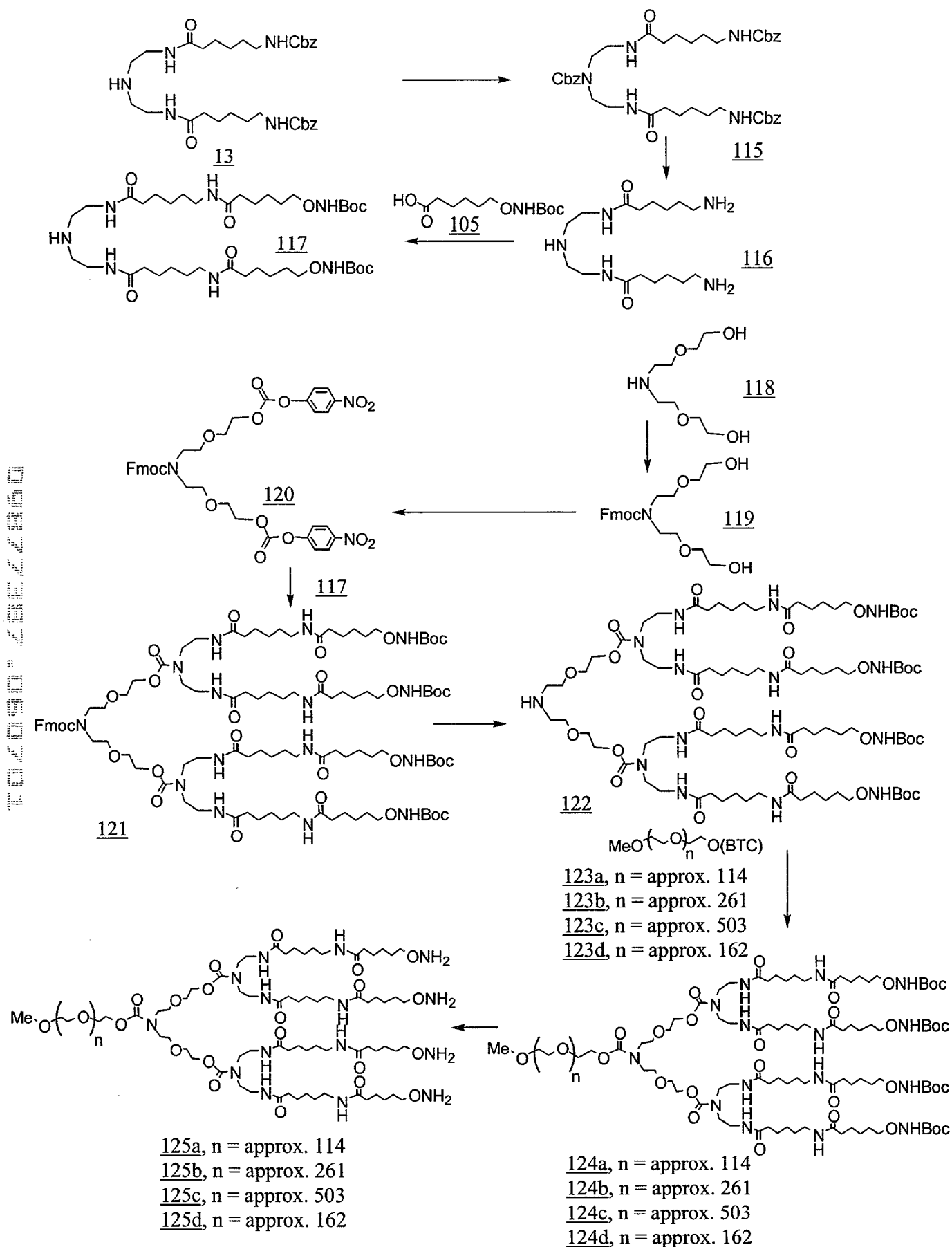


Figure 9

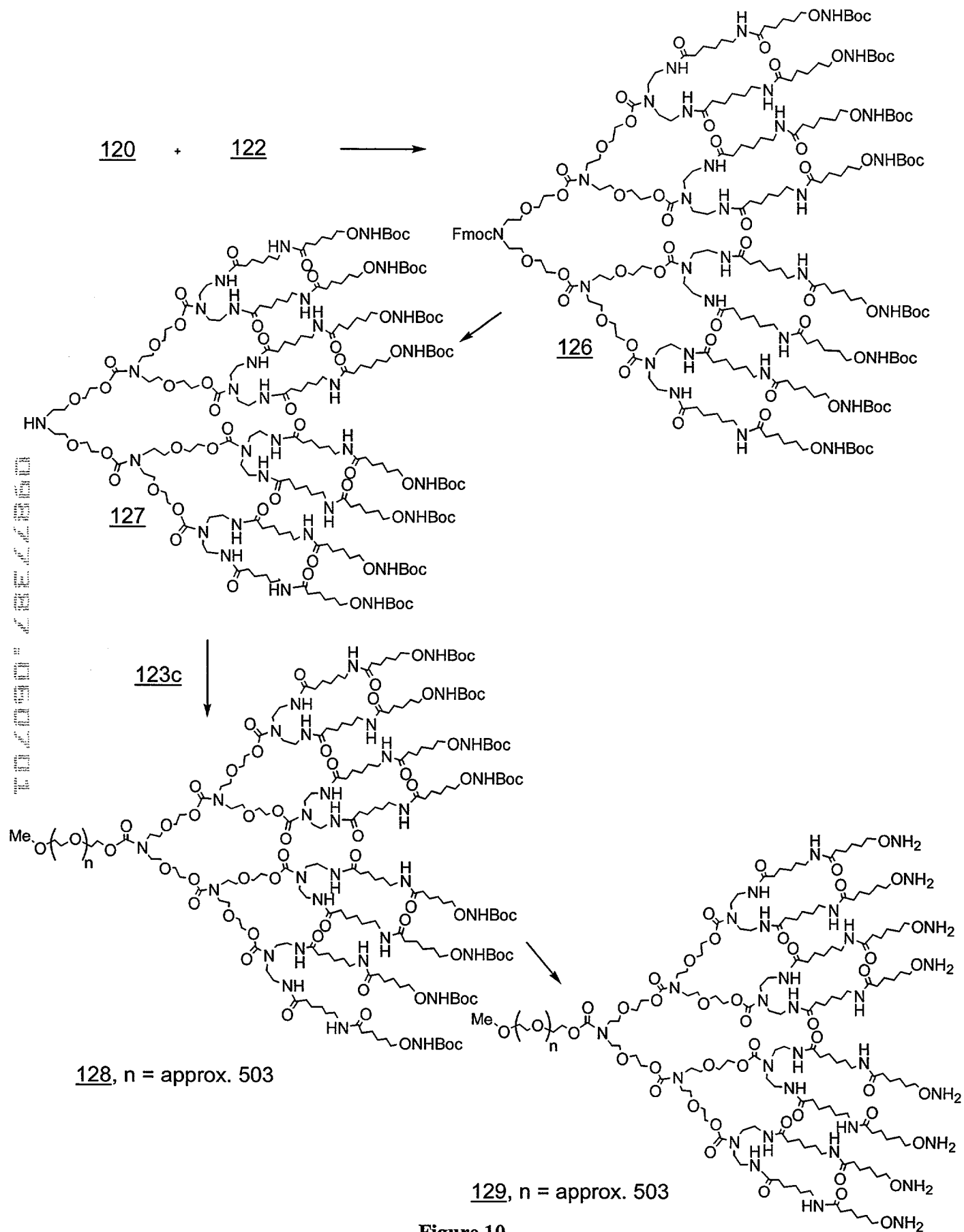
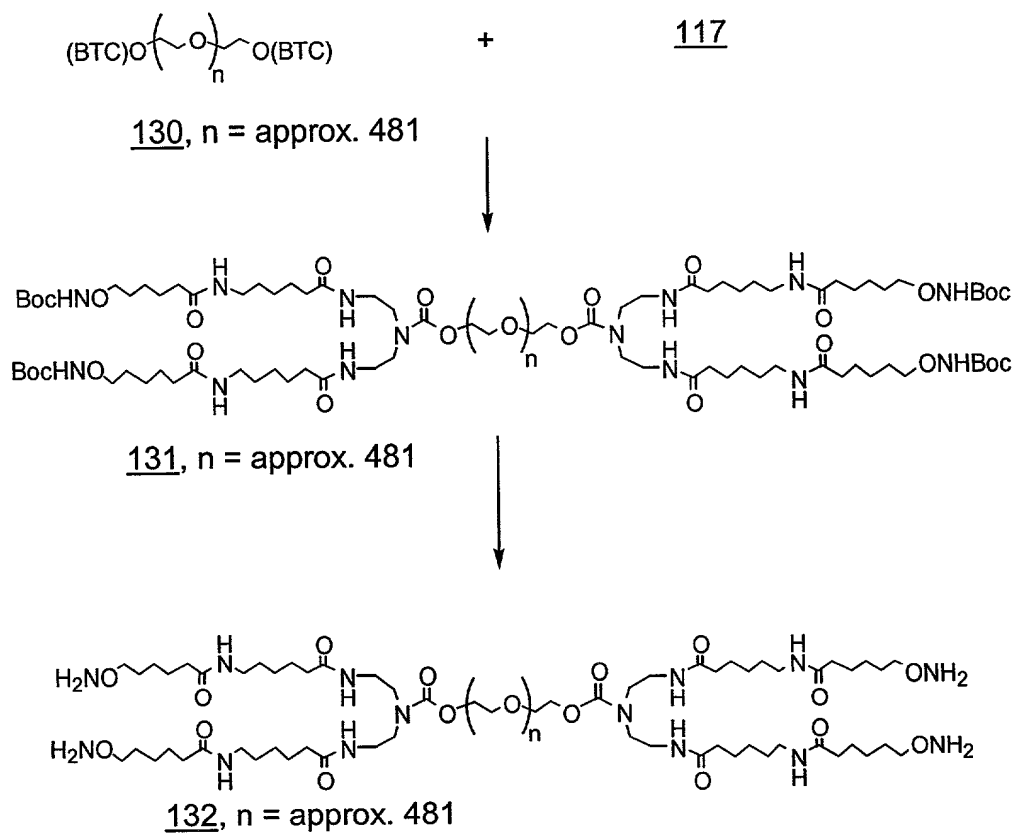


Figure 10



**Figure 11**

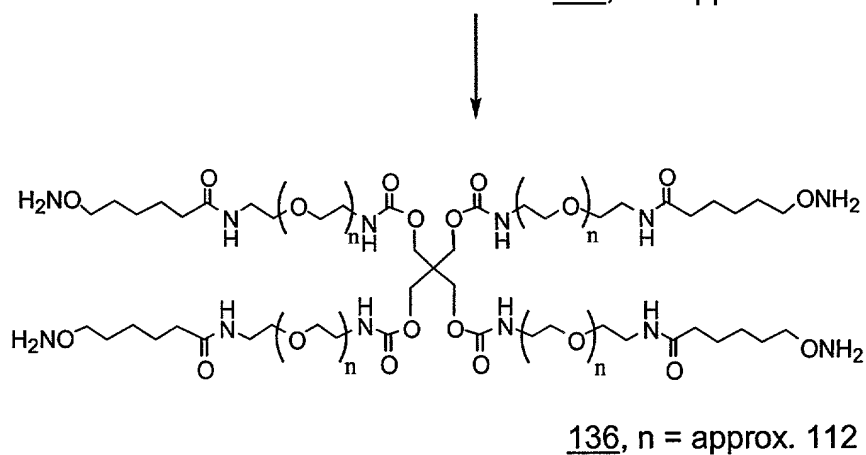
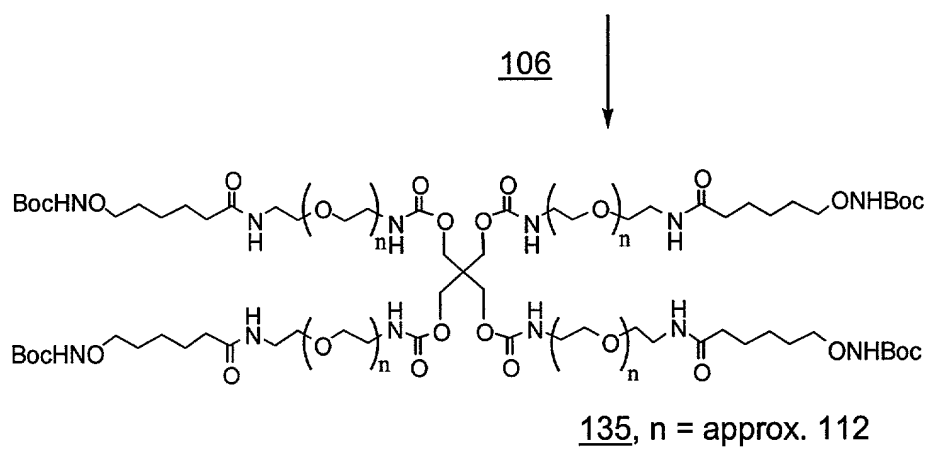
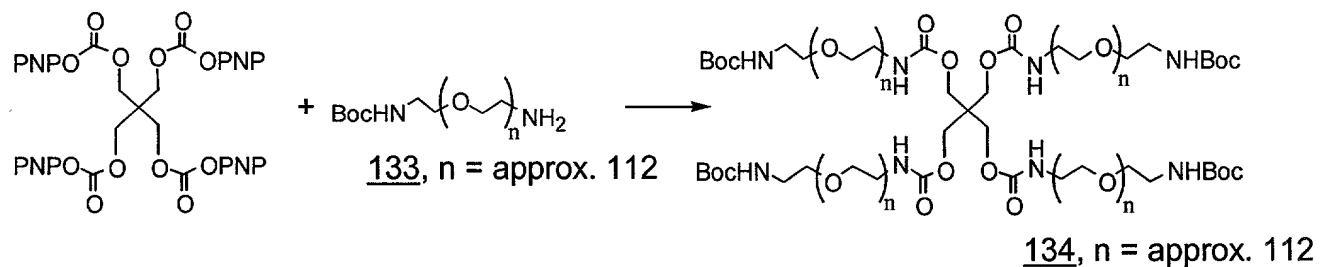


Figure 12

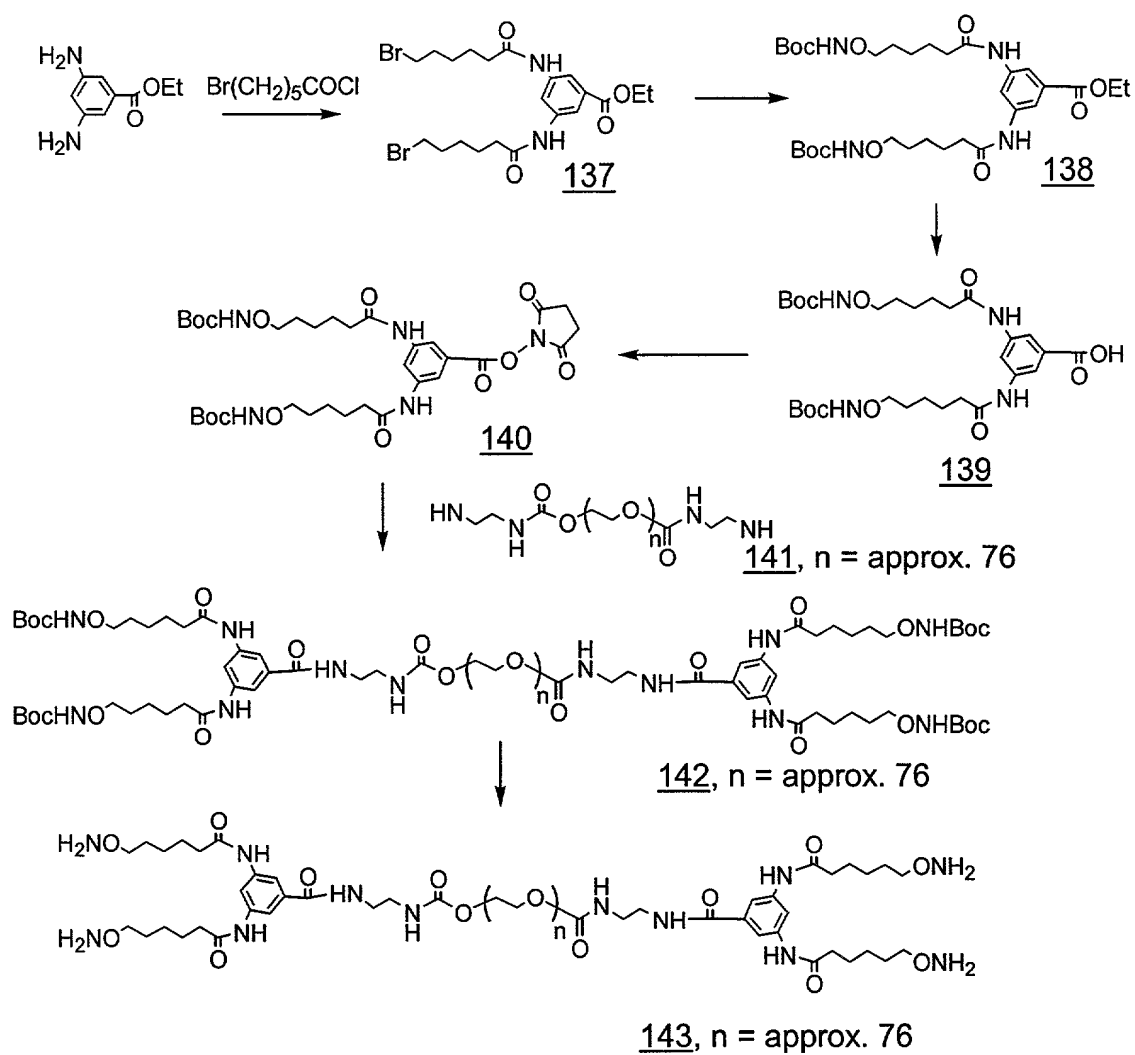
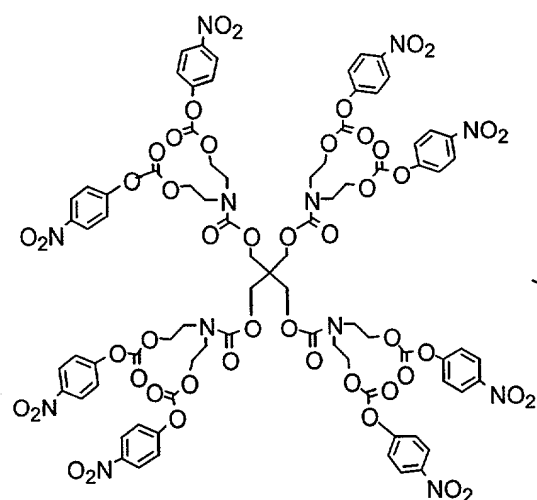


Figure 13



Compound 50a

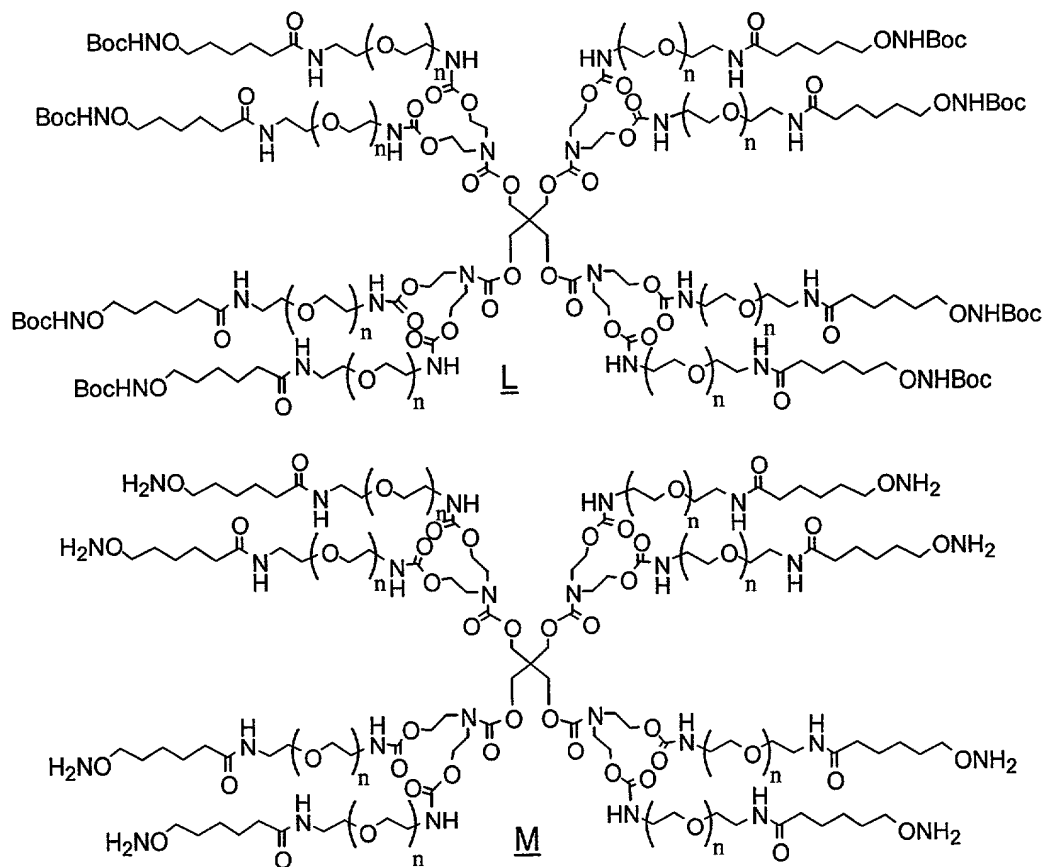
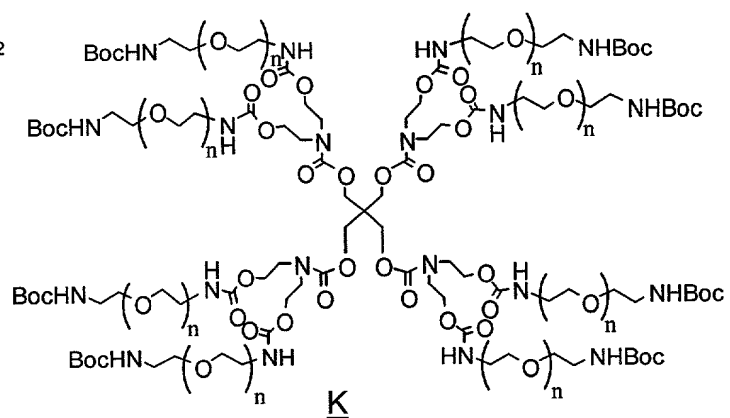
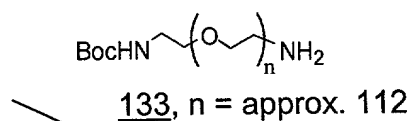
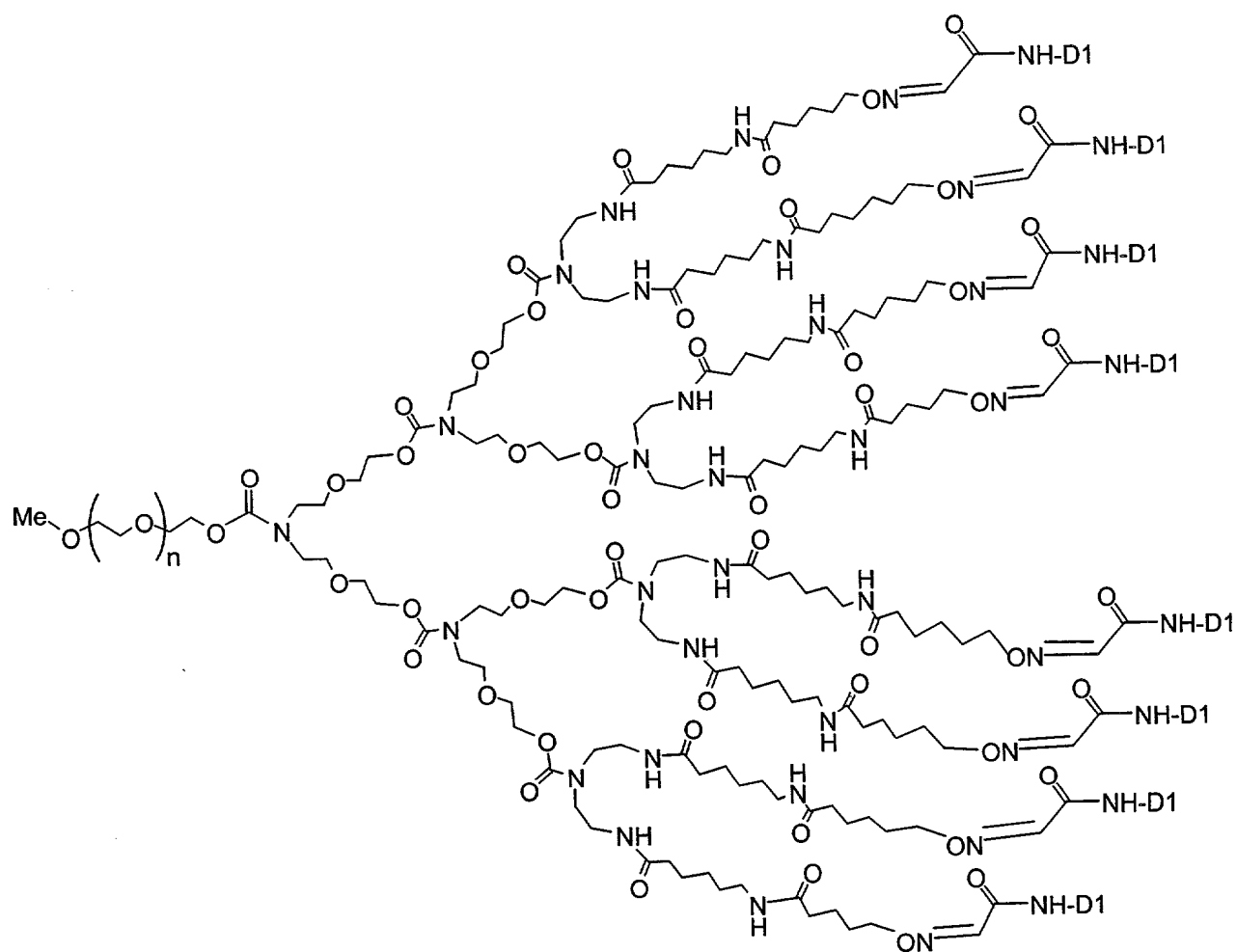


Figure 14





300,  $n = \text{approx. } 503$

**Figure 16**



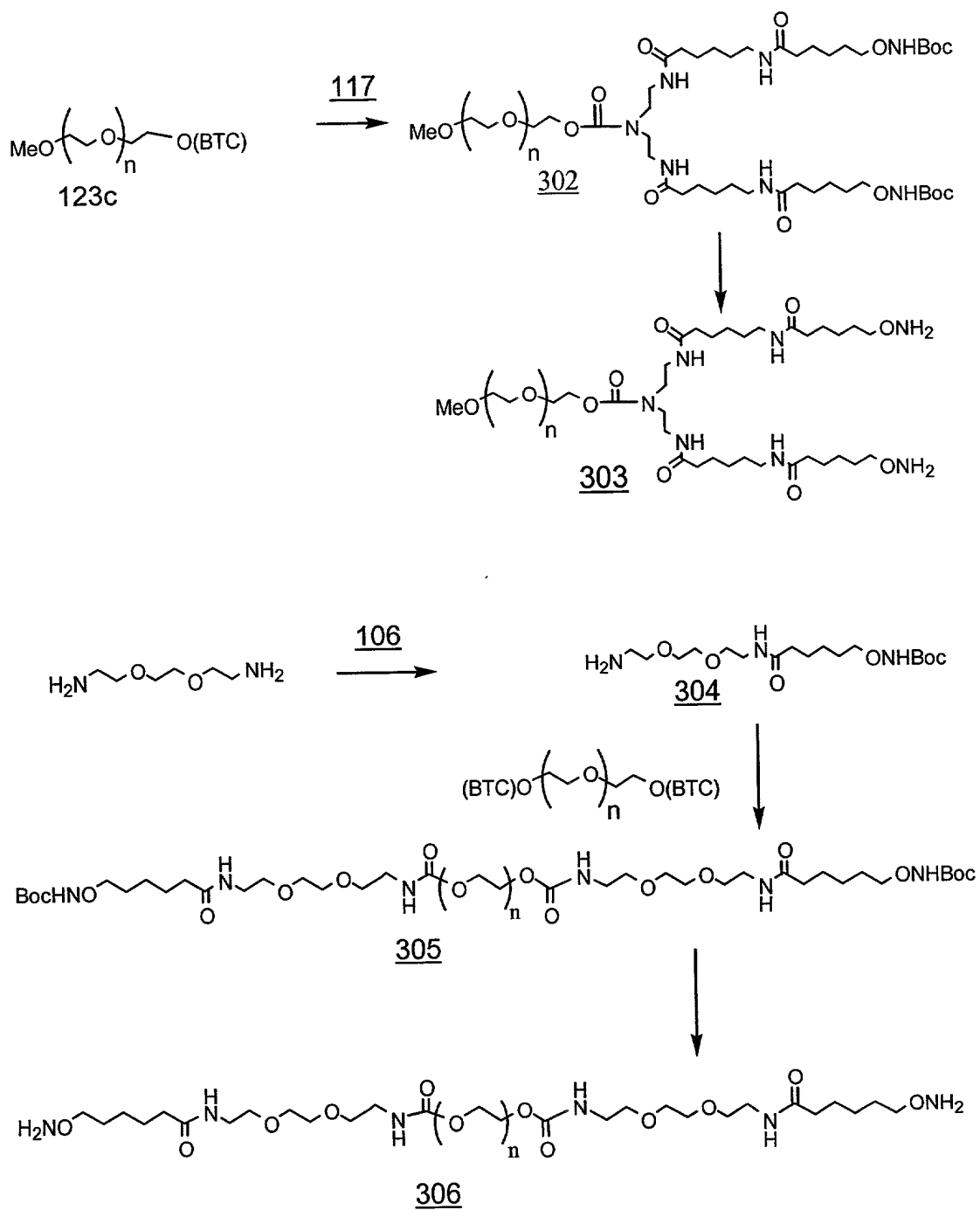
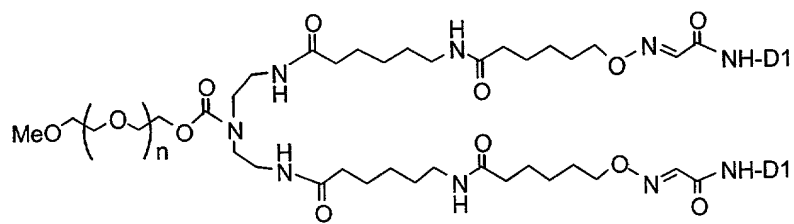
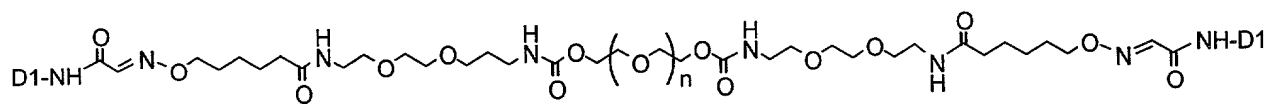


Figure 17



309, n = approx. 500

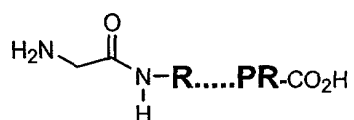


310, n = approx. 500

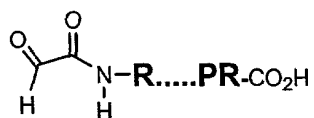
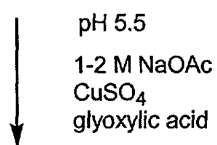
**Figure 18**

gga	cgg	acc	tgt	ccc	aag	cca	gat	gat	tta	cca	ttt	tcc	aca	gtg	gtc	48
Gly	Arg	Thr	Cys	Pro	Lys	Pro	Asp	Asp	Leu	Pro	Phe	Ser	Thr	Val	Val	
1				5					10					15		
ccg	tta	aaa	aca	ttc	tat	gag	cca	gga	gaa	gag	att	acg	tat	tcc	tgc	96
Pro	Leu	Lys	Thr	Phe	Tyr	Glu	Pro	Gly	Glu	Glu	Ile	Thr	Tyr	Ser	Cys	
			20					25					30			
aag	ccg	ggc	tat	gtg	tcc	cga	gga	ggg	atg	aga	aag	ttt	atc	tgc	cct	144
Lys	Pro	Gly	Tyr	Val	Ser	Arg	Gly	Gly	Met	Arg	Lys	Phe	Ile	Cys	Pro	
		35					40					45				
ctc	aca	gga	ctg	tgg	ccc	atc	aac	act	ctg	aaa	tgt	aca	ccc	aga	gta	192
Leu	Thr	Gly	Leu	Trp	Pro	Ile	Asn	Thr	Leu	Lys	Cys	Thr	Pro	Arg	Val	
	50					55					60					

**Figure 19**



Domain 1 of  $\beta_2\text{GPI}$  ( $\text{D}_1$ , where bold letters stand for single letter amino acid code of terminal amino acids of Domain 1 of  $\beta_2\text{GPI}$ )



Transaminated Domain 1 (**TA/D1**)  
 Comprising a terminal glyoxyl group

**Figure 20**